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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,504	12/14/2001	John O. Lamping	020087-003500US	5615
20350	7590 05/05/2005		EXAM	INER
	D AND TOWNSENI RCADERO CENTER	NGUYEN	, CINDY	
EIGHTH FLOOR			ART UNIT	PAPER NUMBER
SAN FRANC	ANCISCO, CA 94111-383	34	2161	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/017,504	LAMPING ET AL.				
Office Action Summary	Examiner	Art Unit				
	Cindy Nguyen	2171				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet v	vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may a ly within the statutory minimum of th will apply and will expire SIX (6) MO e, cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 24 F	ebruary 2005.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.	•				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-3,5-13 and 15-19 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-3,5-13 and 15-19 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 14 December 2001 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	are: a)⊠ accepted or b)[ drawing(s) be held in abeya tion is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. §§ 119 and 120	, , , , , , , , , , , , , , , , , , ,	•				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domesti since a specific reference was included in the first 37 CFR 1.78.  a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domesti reference was included in the first sentence of the	is have been received. Its have been received in a rity documents have been u (PCT Rule 17.2(a)). It of the certified copies not ic priority under 35 U.S.C st sentence of the specific povisional application has been priority under 35 U.S.C	Application No In received in this National Stage  threceived. It is a provisional application or in an Application Data Sheet.  Deen received. It is a provisional application or in an Application Data Sheet.  Deen received. It is a provisional application or in an Application Data Sheet.				
Attachment(s)						

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)

6) Other:

4) Interview Summary (PTO-413) Paper No(s). \_\_ 5) Notice of Informal Patent Application (PTO-152)

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### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/24/04 has been entered.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerre et al. (U.S 6446061) in view of Chakrabarti et al. (US 20010039544) (Chakrabarti).

Regarding claims 1 and 11, Doerre discloses: A method and a computer aided information organization device for clustering a plurality of items, each of the items

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including information, guided toward an initial organization structure, the method comprising:

inputting a plurality of items, each of the items including information, into a clustering process (col. 12, lines 17-34, Doerre);

inputting an initial organization structure into the clustering process, the initial organization structure including one or more categories, at least one of the categories being associated with one of the items (col. 12, lines 35-41, Doerre);

processing using at least processing hardware the plurality of items based upon at least the initial organization structure and the information in each of the items in at least the clustering process (col. 19, lines 35-41, Doerre)

However, Doerre didn't disclose: determining a resulting organization structure based upon the processing of the plurality of items, the initial organization structure, and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category coupled to the initial organization structure. On the other hand, Chakrabarti discloses: determining a resulting organization structure based upon the processing of the plurality of items (page 7, 0075, Chakrabarti), the initial organization structure (page 7, 0074, Chakrabarti), and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category coupled to the initial organization structure (page 7, 0077-0078, Chakrabarti). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the steps for determining a

resulting organization structure based upon the processing of the plurality of items, the initial organization structure, and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category coupled to the initial organization structure in the system of Doerre as taught by Chakrabarti. The motivation being to enable the system provided a method for organizing hierarchical information elements and their relationships enables a much speedier search when information element of information is sought, identification of its category affiliation not only designates the features to be looked for and immediately directing the search to the relevant section of the organization.

In addition, Doerre/Chakrabarti discloses: storing the resulting organization structure in the one or more memories or another memory (col. 15, lines 15-20, Doerre)

Regarding claims 2 and 12, all the limitations of these claims have been noted in the rejection of claims 1 and 11 above, respectively. In addition, Doerre/Chakrabarti discloses: wherein the processing comprises determining a likeness level between a first item and a second item, the likeness level between two items increased if they are both similar to items in one or more of the categories of the initial organization structure col. 18, lines 25-44, Doerre).

Regarding claims 3 and 13, all the limitations of these claims have been noted in the rejection of claims 2 and 12 above, respectively. In addition, Doerre/Chakrabarti

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discloses: wherein the determining the likeness level between the first item and the second item comprising:

associating a first feature vector with the first item and a second feature vector with the second item, each feature vector representing information associated with each item (col. 17, lines 28-43, Doerre);

adding a first additional feature and a second additional feature to the first feature vector and the second feature vector of the first item and the second item, respectively, the first additional feature representing a first category of the initial organization structure and the second additional feature representing a second category of the initial organization structure, the first additional feature providing a degree to which the first item is similar to one or more items in the first category of the initial organization structure (col. 13, lines 63 to col. 14, lines 20, Doerre);

calculating a degree of similarity of the first item and the second item including calculating a similarity measure between the first additional feature and the second additional feature (col. 18, lines 13-24, Doerre).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: wherein the resulting organization structure relates to the initial organization structure based upon a category similarity (col. 15, lines 1-20, Doerre).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: wherein the

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resulting organization structure relates to the initial organization structure based upon a similarity of hierarchy structure (col. 18, lines 52-67, Doerre).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: wherein the item is a document, a product, a person, a DNA sequence, a purchase transaction, a financial record, or a species description (col. 18, lines 25-44, Doerre).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: further comprising outputting the resulting organization structure on an output device (col. 20, lines 44-57, Doerre).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: wherein the processing hardware uses at least a 500 MHz clock to efficiently run the clustering process (col. 20, lines 16-30, Doerre).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Chakrabarti discloses: wherein the plurality of items includes at least 10,000 items (col. 20, lines 32-42, Doerre).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre/Chakrabarti discloses: further comprising a sixth code directed to outputting the resulting organization structure, the resulting organization structure including a plurality of categories (col. 15, lines 15-20, Doerre).

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Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 15 above. In addition, Doerre/Chakrabarti discloses: further comprising a seventh code directed to inputting additional items using the resulting organization structure (col. 15, lines 15-20, Doerre).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre/Chakrabarti discloses: further comprising a sixth code directed to independently modifying the resulting organization structure using a graphical user interface (col. 16, lines 61-67, Doerre).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 17 above. In addition, Doerre/Chakrabarti discloses: wherein a user provides the independently modifying coupled to the graphical user interface (col. 17, lines 1-6, Doerre).

Regarding claim 19, Doerre/Chakrabarti discloses: a computer implemented method for clustering a plurality of items, the method comprising: inputting a first hierarchy, the first hierarchy includes at least one category (col. 13, lines 24-54, Doerre);

inputting a plurality of items, each of the plurality of items includes information (col. 14, lines 26-57, Doerre);

the at least one category being associated with one of the items (col. 14, lines 26-57, Doerre);

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processing by the computer the plurality of items based upon at least the first hierarchy and the information in each of the items (col. 14, lines 26-57, Doerre);

deterring a second hierarchy based upon the processing of the plurality of items, first hierarchy, and the information in each of the items, the second hierarchy includes a portion of the first hierarchy and at least one additional category coupled to the first hierarchy (page 7, 0078-0079, Chakrabarti);

storing the second hierarchy in memory (col. 14, lines 57 to col. 15, lines 20, Doerre);

assigning each of the plurality of items to a category of the second hierarchy (col. 12, lines 16 to col. 13, lines 54, Doerre).

### 1. Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pirolli et al. (U.S 5895470). System for categorizing documents in a linked collection of documents.

Hickerman et al. (U.S 6216134). Method and system for visualization of clusters and classifications.

Keith (U.S 6629097). Displaying implicit associations among items in loosely structured data set.

Marques (U.S 6182066). Category processing of query topics and electronic document content topics.

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### 2. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cindy Nguyen April 21, 2005

PRIMARY EXAMINED